REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-2 and 4-20 are now pending. Claims 6-8 are withdrawn from further consideration as directed to non-elected species.

Original claim 3 was rejected under 35 USC 112, second paragraph, as being indefinite. The subject matter of claim 3 has been incorporated into amended claim 1. Furthermore, that subject matter has been revised responsive to the Examiner's rejection. Thus, claim 1 now more specifically recites that a gas path is provided through the peripheral core so that gas can flow between the inner surface of the peripheral core and the outer surface of the peripheral core. This is consistent with the original disclosure, for example, at page 6, lines 3-7 and page 10, line 19 – page 11, line 1. A slit or the like is defined in the peripheral core so that gas can flow through the peripheral core, between the inner and outer surfaces thereof, ultimately into contact with the primary spool. In this regard, claim 1 has also been amended to further refer to the interval gap formed between the inner surface of the peripheral core and the outer surface of the turns of the primary coil wire as illustrated in Figure 1. Thus, the blow by gas flows through, e.g., the slit in the peripheral core, through the interval gap, through spaces between turns of the primary coil wire and to the primary spool surface.

In view of the foregoing, reconsideration and withdrawal of the rejection under 35 USC 112, second paragraph, is respectfully requested.

Claim 14 was rejected under 35 USC 102(b) as being anticipated by Shimada et al. Applicant respectfully traverses this rejection.

With regard to claim 14, Shimada (and Nakamura) do not explicitly describe a difference in expansion coefficient between resins of the secondary spool and a high

voltage tower. Furthermore, neither of these references teach or explicitly describe a structure wherein a high voltage tower covers and contacts the bottom of the secondary spool. As such, these references do not teach or suggest the concept of enhancing the sealing characteristic between the secondary spool and the high voltage tower, especially when heated up. It is therefore respectfully submitted that the invention claimed would not have been anticipated by nor obvious from the applied art.

Claims 1-5 and 9-14 were rejected under 35 USC 103(a) as being unpatentable over Nakamura in view of Shimada. Applicant respectfully traverses this rejection.

Nakamura disclosures a primary bobbin spool 14 and a high voltage tower portion 11a, wherein the primary bobbin 14 and the high voltage tower portion 11a are integrated. Nakamura's disclosure mentions that a cutout portion is formed in iron core 19 apparently to allow iron core 19 to be spread and then reforming as a cylinder by spring force as shown in Figure 3. Nakamura further discloses that the surface of the primary coil 15 is protected by heat resistant insulation material 30a within the sheath iron core 19. Because Nakamura discloses that spring force is provided against the force to spread the cutout portion and because Nakamura discloses an insulation material 30a within the sheath iron core, it is evident that Nakamura does not teach or suggest a gas path defined so that gas can reach the primary bobbin as required by applicant's claim 1. Indeed, Nakamura does not teach or in any way suggest that the primary spool is fluidly connected with an internal space of the plug hole.

The ignition coil device recited in applicant's claim 1 is configured so that not only a high power voltage tower but also the primary spool is exposed to the gas in the internal space of the plug hole. Indeed, in accordance with the invention as recited in claim 1, the primary spool is exposed to gas from the internal space by way of a gas path defined through the peripheral core, and an interval gap. Neither of the references cited by the Examiner teach or suggest a primary spool fluidly connected with an internal space of the plug hole, such that gas can reach the primary spool from

the plug hole as is the case with applicant's claimed invention. In this regard, the structure of the ignition coil device of the invention is designed so that both a high voltage tower and also a primary spool will be exposed to the gas condition of the internal space of the plug hole. The concept of exposing the primary spool to the gas condition of the plug hole via a gas path through the peripheral core and an interval gap as recited in claim 1 is not anticipated by nor suggested by the cited references. It is therefore respectfully submitted that the skilled artisan consulting the cited art would not be taught nor motivated to produce the claimed invention. In contrast to the invention recited in claim 1, neither Nakamura or Shimada teach or in any way suggest exposing a primary spool to gas from a plug hole via the peripheral core. Therefore, even if Nakamura and Shimada could be combined, the invention of applicant's claim 1 would not be disclosed nor would the effects of the present invention of helping to prevent development of ESC in members forming the ignition coil device, even through the members are exposed to the gas from the plug hole. It is therefore respectfully submitted that the invention of claim 1 and the claims dependent therefrom is not anticipated by nor would it have been obvious from Nakamura and/or Shimada taken alone or in any combination.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

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